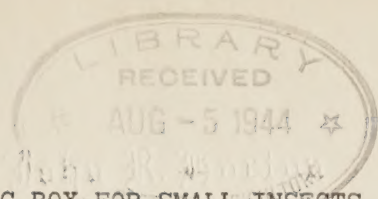


Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



ET-40

March 1935

REARING BOX FOR SMALL INSECTS

By H. R. Painter, Division of Cereal and Forage Insect Investigations,
Bureau of Entomology and Plant Quarantine,
U. S. Department of Agriculture

The device shown in the accompanying illustrations (figs. 1 and 2) has been found to be quite satisfactory for rearing parasites from hessian fly puparia at the laboratory at Lafayette, Ind. It is believed that this rearing box could be used for various species of small insects. The galvanized-iron box is 19 inches long, 11½ inches high, and 5 inches from front to back. The back of the box has a slip-on cover of the same material. The front is formed by a board (1 by 12 inches) with 15-millimeter holes 1¼ inches apart bored entirely through. Two pieces of glass tubing (15 by 50 mm.) are inserted in each hole with the ends of the tubes in contact at the middle of the board. Fine gauze is shellacked onto the exposed ends of the tubes to confine insects and at the same time allow ventilation. A cone of sheet cel-luloid with a small opening at the apex is placed in the board end of each tube. The inner glass tube with cone serves as a receptacle for the hessian fly puparia. The outer tube with cone permits insects to pass from the inner tube to the outer tube, where they are trapped and easily removed. Material may be identified by a label placed in the tube with it. A small glavanized-iron trough containing moist cotton fits inside the box and permits regula-tion of moisture. The apparatus stands on three short supports. Two are rubber-headed wood screws in the bottom edge of the front board, near each end. The third is a small strip of galvanized sheet iron bent at two opposite right angles and soldered at the middle and near the back edge of the bottom. This support permits easy removal of the cover. Holes in the board are kept plugged with corks until they are to be occupied by tubes containing insect forms. For inspection of caged material and handling insects as they issue, this device is superior to other types of cages formerly used at this lab-oratory.

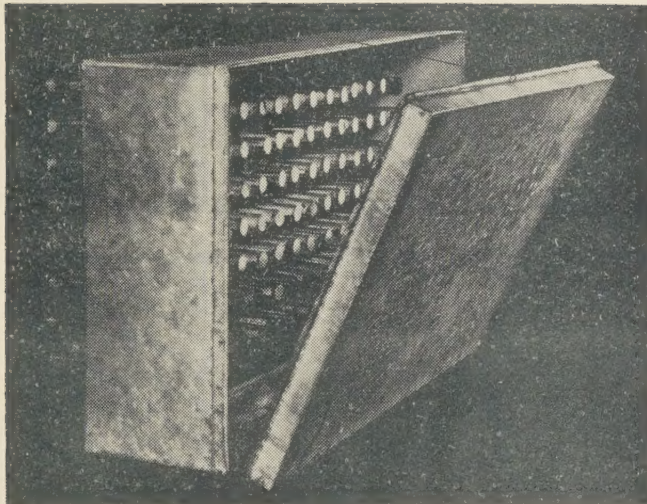


Fig. 1

Rearing box with back partly removed

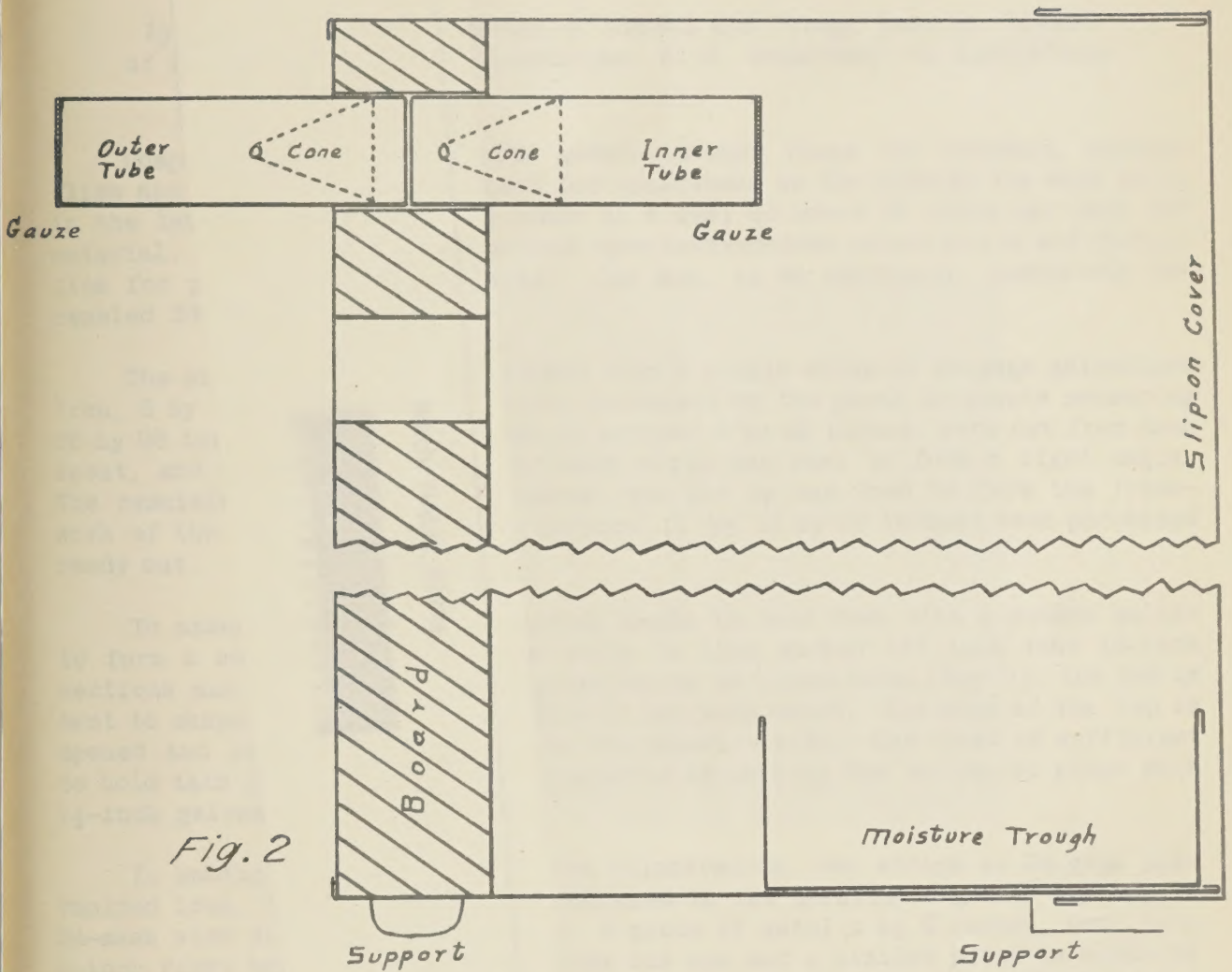


Fig. 2

Vertical Section Showing Arrangement of Parts

